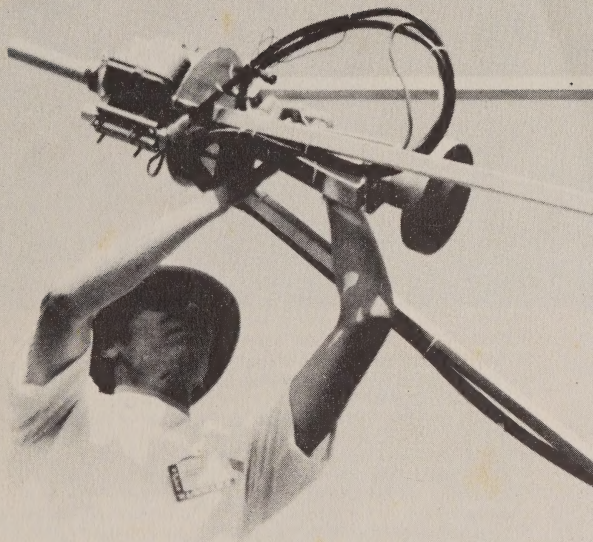
SVS '81



ANAHEIM, CA.

November 20-21-22

Produced by
SATELLITE TELEVISION
TECHNOLOGY, INTERNATIONAL

WHAT TO EXPECT

WELCOME to Satellite Video Show '81, here in Anaheim, California. This is the seventh such gathering created by Satellite Television Technology (International) since the first SPTS was held in 1979 (see overview on next page).

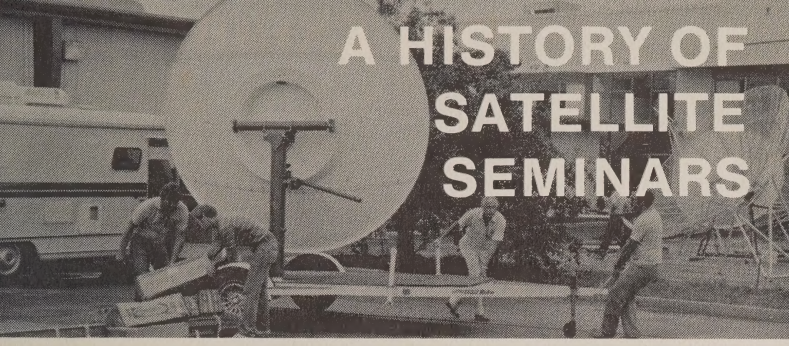
This meeting will be unique for a number of reasons. This is a rapidly maturing industry, barely two years old but growing at a rate very few would have forecast in 1979. Verifiable numbers are difficult to obtain but it appears that between 1,200 and 1,500 complete, new private earth terminals are being sold and installed into American and Canadian homes each month. The majority of these terminal systems are being sold by local, private business people and sell (installed) for upwards of $5900 each. These numbers compare favorably to those of one year ago (estimated at 200-300 systems per month), or, two years ago (under 20 systems per month).

During the past six months a number of substantial, "brand-name" and world famous firms have developed product for the home terminal marketplace/industry. Names such as Zenith/Heath (kit), Channel Master and Winegard have become a part of a growing industry. And to the continued amazement of many, very little of the product now being sold into and by the industry originates "off-shore". This began as an American industry, and, it continues to grow as an American industry.

The growth of satellite "services" (i.e. programming) continues to explode at a breathtaking rate. As recently as one year ago, virtually all private terminals sold were designed to function with a single satellite; the popular SATCOM FI, or the so-called "cable TV satellite". With 15 to 20 TV "channels available", that seemed (at the time) like plenty of satellite service for the dollars invested. Today, close to half of the terminals sold are equipped with hand or mechanical 'drive systems" that allow the user to move his dish antenna from satellite to satellite with relative ease. Equipped with such a rotational system, the satellite viewer has virtually instant access to as many as 60 channels of television services.

Home system growth is producing a backlash from many of the program suppliers, who refuse to grant permission to private viewers to tune-in their programming. SPACE, the industry trade association, has led the battle to gain formal recognition for the private terminal viewer, and there are both legislative or regulatory, and, courtroom battles ahead in this ill-defined area.

WELCOME TO ANAHEIM - for SVS '81, and three days of focusing on where this industry is, and is headed, in the year ahead!



A HISTORY OF SATELLITE SEMINARS

SEVEN Satellite Seminars ago, and back some 27 months, approximately 500 people and 8 exhibiting firms gathered in Oklahoma City to take part in the first seminar or conference on home/private satellite terminals. It was an historic event for many reasons, including an attempt by a trade association that felt threatened by home terminals, to stop the seminar before it began, by asking for a Federal Court injunction against the first SPTS.

THIS industry was started by private terminal Pioneer Bob Cooper, who foresaw the development of private terminals as early as 1976. Between 1976 and 1979, Cooper wrote widely read magazine articles explaining what private terminals were, and how they worked. One such article, appearing in the national **TV GUIDE** in October of 1978 resulted in massive publicity for "the movement". After that article, and a subsequent visit by a CBS Evening News crew that aired a report on the Cronkite Evening News, Cooper was swamped by thousands of letters from would-be private terminal owners. By August of 1979, Cooper plus fellow pioneers Robert Coleman, H. Taylor Howard and Paul Shuch had put together a "seminar program" designed to teach others what they knew about building and operating "low-cost", private terminals for home use. More than a dozen of the supplier firms, who today have worked for positions of stature in this industry, got their start in this industry by being at and participating in the first SPTS event.

The second SPTS was held in Miami, Florida in February of 1980. By now, the industry had more than 20 exhibit booths; many of those who attended the first SPTS had "gone home" and developed products for sale, some six months later. At the Miami meeting, the traditional "antenna parking lot" featured first-time-ever reception, on a private terminal, from a satellite sending international transmissions to Brazil (Intelsat IV-A).

Events followed rapidly; **San Jose in July of 1980** (where attendees witnessed the first public showing of a Russian Molniya satellite); **Houston in November of 1980** (the first seminar/conference dedicated to helping dealers and distributors get started); **Washington** (D.C.) **in April of 1981** (featuring Congressmen, an FCC Commissioner and Ralph Nader as participants), and most recently, **Omaha** (N.E.) **in August** of this year.

Each seminar/conference/show has revealed the rapid development of new hardware, new marketing/sales philosophies and new approaches to the regulatory quagmire. The sound argument made is that satellite services are universally available, continent-wide, and for many millions of US and Canadian homes, the **only** access to television programming. The counter argument notes that the present generation of 4 gig-a-hertz ("C-band") satellites was never intended for private, home reception, and, they are not (in regulatory language or by definition) "broadcasting satellites". Between those two polarities there exists those services who routinely "scramble" their transmissions to prevent "unauthorized viewing", and those who readily grant "letters of permission" to anyone requesting same, charging no fee for "use" of their services. In between, there are more than a dozen shades of "conflict" between program suppliers/satellite operators, and, private terminal owners and viewers.

ALL of this and much more comes into focus at SVS '81 Anaheim.

THE EXHIBITION

EQUIPMENT has made this industry what it is today. Over the past 27 months, equipment prices have spiraled downward, stabilized, and then as system equipment sophistication has increased, inched back upwards again. At SVS '81 Anaheim you will find the largest concentration of private satellite terminal equipment ever assembled in one place, at one time. There is equipment covering all of the pricing "levels" of the industry, from the low-ball "under $2,000 complete-system" hardware (requiring a fair amount of do-it-yourself energy and expertise), to the ultra-sophisticated, "commercial-quality" systems featuring automated receiver and dish techniques. At every level of enthusiasm, there is equipment on display here, and an experienced designer / seller ready to assist you in your hardware selection.

ADVANCED ELECTRONICS, INC. - 5085 S. Arville St., Las Vegas, NV 89118 (702-871-8766). Total systems, Howard Wilson, Janna Anderson, Jeff Stouffer ..... Booth D-1

ADVANCED VIDEO COMMUNICATIONS, INC. - 7652 4th Avenue, White City, OR 97503 (503-826-5445). Total systems. John Weber, Donald Bennett, Alex Strong, Dennis Schneider, Mark Forsyth ..... Booths A-1 and A-2

ANTENNA DEVELOPMENT & MANUFACTURING, INC. - P. O. Box 1178, Poplar Bluff, MO 63901 (314-785-5988). Total systems. James Gowen, Linda Gowen, Ed Randall, Charles Shumate, Ron Moring ..... Booths G-5 and G-6

ARUNTA ENGINEERING CO. - P. O. Box 15082, Phoenix, AZ 85060 (602-956-7042). Stereo processors, Satellite locator calculators. Edward Grotsky, Jim Burgholzer, Pamela Grotsky, Ray Cali, Jan Burgholzer .... Booths D-14 and D-15

AVANTEK, INC. - 3175 Bowers Avenue, San Jose, CA 95051 (408-727-0700). Receiver systems, LNAs. Mark Selinger, Barry Bakner, Dave Welling, Chuck Cressler, Roger Johnson, Bob Mayer, Mike Neesham ..... Booths E-3 and E-4

AVCOM OF VA., INC. - 500 Research Road, Richmond, VA 23236 (804-794-2500). Receiver, powerblocks, power dividers, isolators. Andy Hatfield, Pat Hatfield, Sandy Cottrell. ..... Booths F-5 and F-6

BOMAN INDUSTRIES - 9300 Hall Road, Downey, CA 90241 (213-869-4041). Total systems. Robert Maniaci, Richard Pelletier. ..... Booth D-9

CAL/TECH DISTRIBUTING - 2745 Regal Park Drive, Anaheim, CA 92806 (714-632-7960). Total systems. J. L. "Chris" Christianson, Allen N, Jerry Partin, Peter Sargent, Joanne Patterson. ..... Booth C-4

CHAPARRAL COMMUNICATIONS, INC. - P. O. Box 832, Los Altos, CA 94022 (415-941-1555) Feeds. Bob B. Taggart. . . . . Booth A-7

COMMUNICATION ENTERPRISES - 11196 Pleasant Valley Road, Penn Valley, CA 95946 (415-432-0466). Total systems. John Craven, Art Myers, Bill Delaney . . . . . Booth B-11

COMTECH DATA CORPORATION - 613 S. Rockford Dr., Tempe, AZ 85281 (602-968-2433). Total systems. Robert Miller, Glen Higgins . . . . . Booth B-3

COOP'S SATELLITE DIGEST - P. O. Box G, Arcadia, OK 73007 (405-396-2574). Susan, Tasha, Kevin and Bob Cooper . . . . . Booth D-6

GUY E. DAVIS - 10424 Owl Circle, Fountain Valley, CA 92708 (714-963-8694) Total systems.Guy Davis. . . . . Booth C-14

DEXCEL, INC. - 2285 C Martin Avenue, Santa Clara, CA 95050 (408-727-9833). LNA, Receiver systems. Art Kawai, Fred Graham, Yozo Satoda . . . . Booth G-14

EARTH TERMINALS - 255 Northland Blvd., Cincinnati, OH 45246 (513-772-6900). Receivers. William Gaible, Clyde Washburn, Richard Grimsley, Cindy Thomas. . . . . Booths E-13 and E-14

ECHOSPHERE CORP. - 5315 S. Broadway, Littleton, CO 80120 (303-797-3231). Total systems. Charlie Ergen, Jim De Franco, Candy McAdam . . . . . Booth G-9

FRANK'S T.V. ANTENNA SERVICE, INC. - 2059 Palos Verdes Drive North, Lomita, CA 90717 (213-539-3900) Total systems. Frank C. Accardo, Gary Accardo, Matthew Accardo . . . . . Booth F-15

GILLASPIE & ASSOCIATES, INC. - 365 San Aleso Avenue, Sunnyvale, CA 94086 (48-730-2500). Total Systems. Norman Gillaspie, Larry Niswander, Bill Melody, Harry Harp. . . . . Booth C-9

HAMILTON SATELLITE SYSTEM, INC. - 1101 E. Chestnut St., Suite A, Santa Ana, CA 92701 (714-543-5217). Total systems. Gay Hamilton. . . . . Booth B-9

H & R COMMUNICATIONS, INC. - Route 3, Pocahontas, AR 72455 (510-647-2291). Total systems, LNAs. John Hastings, Virgil Richardson, Ann Hastings, Mary Richardson. . . . . Booth F-9

HASTINGS ANTENNA - 847 W. 1st, Hastings, NE 68901 (402-463-3598). Total systems. Joe R. Anderson, Rich Potts, Ted Forster . . . . . Booth F-2

HERO COMMUNICATIONS - 1783 West 32nd Place, Hialeah, FL 33012 (305-887-3203) Total systems. Bob Behar, Neal Poller, Carl Vingar. . . . . Booth C-5

HOOSIER ELECTRONICS - P. O. Box 3300, Terre Haute, IN 47803 (812-238-1456). Total systems. Steve Bland, Jeff Vicars, Maxine Burns . . . . . Booths G-3 and G-4

INDUSTRIAL SCIENTIFIC INC. - 5401 Del Rey, Las Vegas, NV 89102 (702-870-3669). Antennas, Total systems. Jackilene Dietrich, Paul Wells, Scott Sharpe . . . . . Booth D-5

INTERNATIONAL VIDEO INC. - 4005 Landski, North Little Rock, AR 72118 (800-643-5427) Antennas, complete systems. Gene Mullenax, Tom Hunt, Dave Mullenax, Bill Little, Randy Butts. . . . . Booth E-8

JANEIL SYSTEMS - 17335 Knapp St., Northridge, CA 91325 (213-349-0866). Total systems, Computer controlled receiver. Denis Dushane, Robert Dushane. . . . . Booth B-1

J V ELECTRONICS - 41 Canal St., Box D 208, Landing, NJ 07850 (201-347-3206). Total systems, giant screen TV. Joseph Valentino, Evelyn Gable, John Foley, Peter Foley, Gary Alexander, Dustin Valladax. . . . . Booths F-1 and G-1

KAUL-TRONICS - Route #1, Box 292, Lone Rock, WI 53556 (608-583-4833). Total systems. John Kaul, Fay Grimm, Jerry Porter, Ed Burkhamer, Ross Halverson, Doug Swartz . . . . . Booths E-1 and E-2

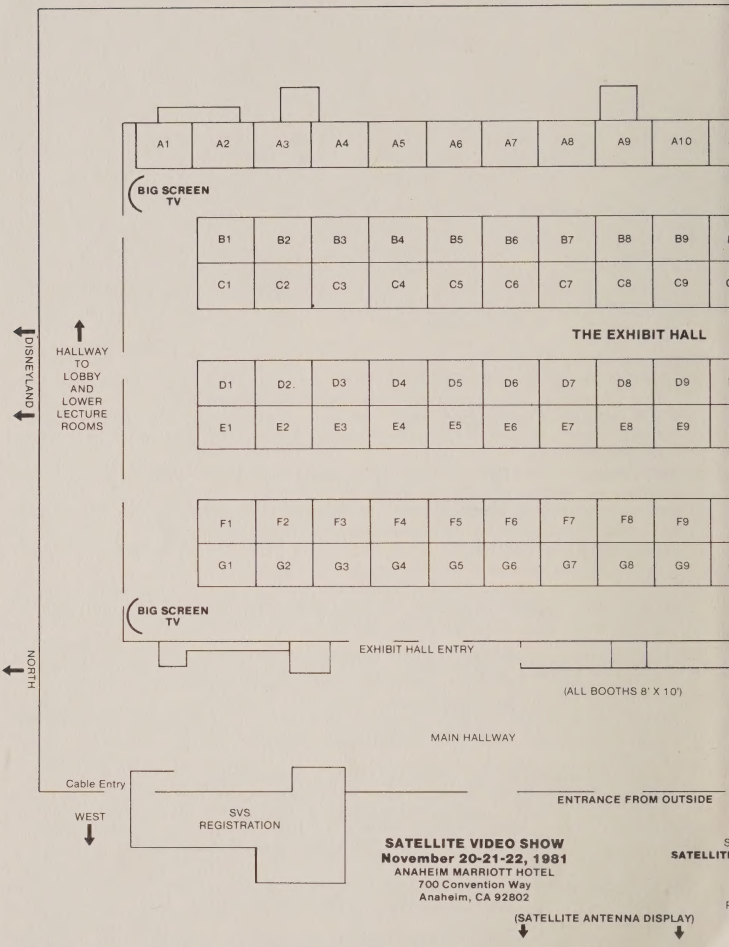
KLM ELECTRONICS, INC. - 16890 Church St., Morgan Hill, CA 95037 (408-779-7363). Total systems. Peter Dalton, Mike Staal, Myrna Staal, David Barker, Jeanne Dalton, Fred Staal . . . . . Booths D-10 and D-11

LEKTRONICS CORPORATION - 2405 de la Cruz Blvd., Santa Clara, CA 95050 (408-727-0564). TVRO Equipment. Laszlo Kiss, Richard Cancilla. . . . . Booth E-9

ROBERT LULY AND ASSOCIATES - P.O. Box 2311, San Bernardino, CA 92406 (714-888-7525). Antennas. Robert Luly, Jan Luly. . . . . Booths C-10 and C-11

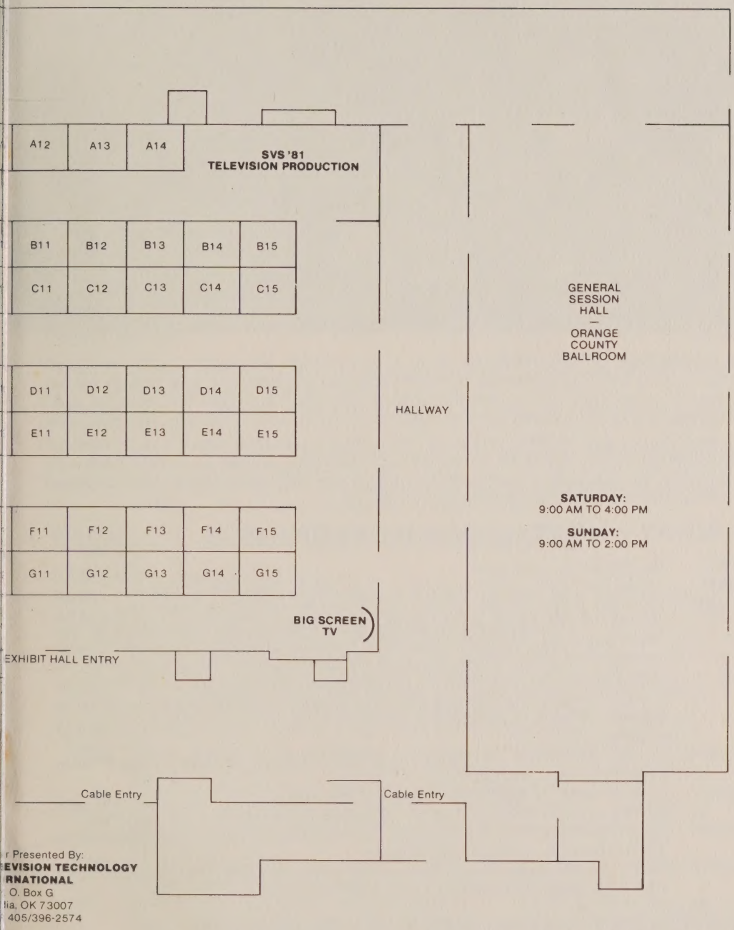
Continued - Page 9

THE L



EXHIBITOR BOOTHS plus the mee
finding your way from place to place.
'81 Registration / Badge area (speci

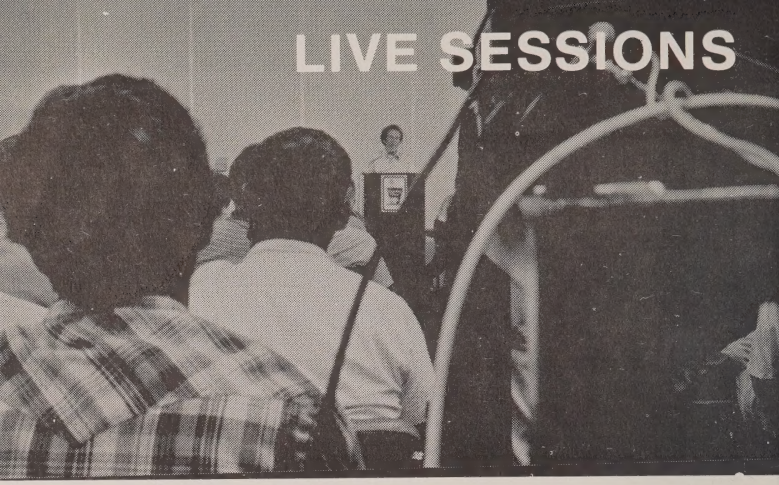
AYOUT



r Presented By:
EVISION TECHNOLOGY
RNATIONAL
. O. Box G
lia, OK 73007
405/396-2574

areas are specified here to assist you in
ou run into difficulties, check with the SVS
on the map).

LIVE SESSIONS



AT THIS SVS '81 GATHERING all seminar sessions are being covered with live video cameras. This coverage is looped through appropriate processing equipment to your room, and to the the display sets on the exhibit hall floor on VHF channel 6. It is not necessary to actually attend sessions in person; you may tape them in your room for later review, or "tune in" at an on-floor viewing location. This experiment in live television coverage is designed to increase your flexibility and "mobility" for the SVS '81 gathering, in effect making it possible for you to do the impossible; be "two places at the same time"!

FRIDAY / NOVEMBER 20 SESSIONS

7AM - Registration area open
8AM - TODAY AT SVS (on channel 6 in your room), with Bob Cooper
10AM - EXHIBIT HALL OPENS (open continuously until 6 PM this date) (NOTE: This special day of exhibit browsing has been set aside for our "VIP" attendees. You will note that in the area of booths A-14 / B-15, SVS '81 has a TV studio. There are large screen projection TV receivers located in the three opposite corners of the Exhibit Hall. The following "Program Events" will originate **in** the SVS '81 TV Studio during the day, and can be viewed on the large screen receivers, or in your Marriott Hotel room on TV channel 6.)
1PM - DOUG DEHNERT Universal Satellite Systems. "Where Is The Private TVRO Industry Headed?".
3PM - LARRY JAMES, SatFinder Systems, Inc. moderates a panel of suppliers on "The Home TVRO Industry - Is This A Business For Professionals?".
4:30 - LOU DORREN, MicroElectronics. "Hi-MIC Technology - What It Means To TVRO Receiver Design Techniques".
6PM - Reminder - In house TV schedule, channel 6, starts at 6 PM and runs to 11 PM. See separate television schedule this date.

SATURDAY / NOVEMBER 21 SESSIONS

7AM - Registration area opens
8AM - TODAY AT SVS (on channel 6 in your room), with Bob Cooper
9AM - INDUSTRY WIDE MEETING, everyone invited to attend. S.P.A.C.E. General Counsel Richard L. Brown and members of the SPACE Board report on the latest regulation and legislative threats to the industry.

Conducted in General Sessions Hall (Orange County Room).

10:30 - EXHIBIT HALL OPENS (open continuously until 6 PM this date)

11AM - ANDY HATFIELD, AVCOM of Virginia, Inc.; "Practical Answers To Practical Problems; TVRO Installations De-Mystified". An informal session of questions and answers from a pioneer. Conducted in General Sessions Hall (Orange County Room).

12N - JOHN RAMSEY, Sat-Tec Systems; "TVRO Receivers - How They Work". A look at design considerations for modern, low-cost satellite video receivers. Conducted in General Sessions Hall (Orange County Room).

1PM - HORTON TOWNES, National Microtech moderates a panel of dealers. "Proper Home Terminal Installation Techniques". Conducted in General Sessions Hall (Orange County Room).

2PM - TAYLOR HOWARD, Stanford University. "The Emerging Foreign Markets in Europe and The Pacific". Conducted in the General Sessions Hall (Orange County Room).

3PM - GUY DAVIS, National Microtech; "Antenna Tests In Low Signal Areas / Puerto Rico and Hawaii". Conducted in General Sessions Hall (Orange County Room).

NOTE: The following sessions will be conducted from the SVS '81 TV studio, located in the Exhibit Hall in the area of booths A-14 / B-15. Coverage will be ONLY on the large screen TV receivers plus on your in-room channel 6 MATV service.

4:30 - JOSEPH VALENTINO, JV Electronics; "Choosing The Right TVRO Equipment, and, Generating Sales".

5PM - ARNOLD GAUB, Quantum Associates; "Antenna Drives and Indicator Systems".

5:30 - JAMES CRAVEN, Communication Enterprises, Inc.; "Marrying TVROs to LPTV and Translators".

6PM - Reminder - in house TV schedule, channel 6, starts at 6 PM and runs to 11 PM. See separate television schedule this date.

SUNDAY / NOVEMBER 22 SESSIONS

7AM - Registration Area Opens

8AM - TODAY AT SVS '81 (on channel 6 in your room), with Bob Cooper

9AM - ART BELL, Advanced Electronics; "Using Small TVROs for Small MATV Systems". Conducted in General Sessions Hall (Orange County Room).

9:30 - ROBERT N. WOLD, President of the Robert Wold Company. Mr. Wold invented today's use of satellite video relay and virtually everyone has seen a "WOLD-COM" feed or color bar logo. He will address "Who Is On The Birds?". Conducted in General Sessions Hall (Orange County Room).

10:30 - EXHIBIT HALL OPENS (open until 3 PM close down on this date)

11AM - JEFF STOUFFER, Advanced Electronics; "Giving The Customer Full Value For His Money". A look at optimizing user packaging and pricing. Conducted in General Sessions Hall (Orange County Room).

12N - GAROLD WORMINGTON, Mid America Video Corp.; "Marketing The Instant Delivery System". Conducted in General Sessions Hall (Orange County Room).

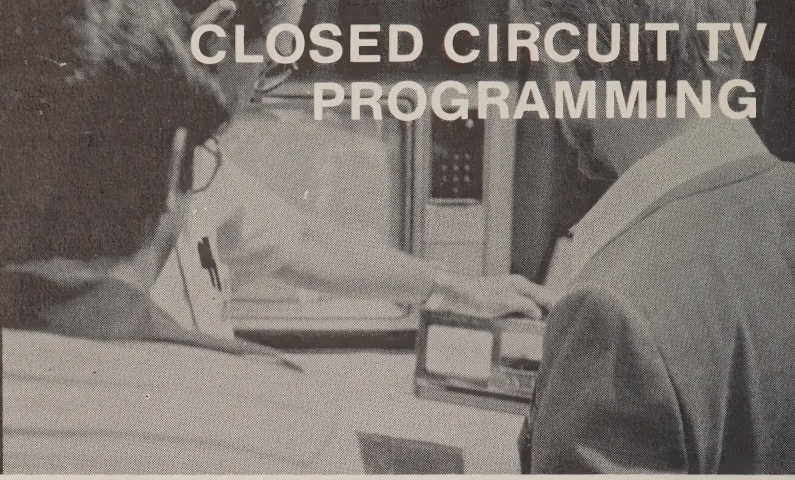
12:30 - CHRIS KALBACH, TDF Corp.; "Remote Antenna Positioning Systems". Conducted in General Sessions Hall (Orange County Room).

1:30 - BOB COOPER, Coop's Satellite Digest; "OK - So What Have We Learned Here - and - Are We Ready For 1982?". Conducted in General Sessions Hall (Orange County Room).

LUNAR INDUSTRIES, INC. - 2775 Kurtz St. #11, San Diego, CA 92110 (714-299-9740). TV translators, LNAs. Louis N. Anciaux, James Bogdan, Steve Franklin ..... Booth D-2

McCULLOUGH - Route 5, Box 97, Salem, AR 72576 (501-895-3167). Total systems, Antennas. H. D. McCullough, J. L. Cox ..... Booth A-9

Continued - Page 10



CLOSED CIRCUIT TV PROGRAMMING

TELEVISION is a "medium" used by all SPTS/SBOC/SVS events to communicate to you, the attendee, information that will assist you in assimilating this fast growing industry, its technology and its leaders. You will find the television schedule active on your in-room television receiver (VHF channel 6) on the hours listed. You may also view the live sessions and/or tapes (as scheduled) on the four big-screen projection television sets located as shown on the exhibit hall floor. If you brought a video tape recorder unit with you to record these live sessions, or tapes, connect the VTR between your in-room wall TV outlet, and, your TV receiver; setting your VTR tuner to channel 6, and your TV receiver to either channel 3 or 4 as your VTR output channel determines.

THURSDAY / November 19 TV Programming

THURSDAY - Starts at 6 PM on TV Channel 6

6PM - They Call This Bird Molniya (how to receive the Russian satellite)

8PM - How The Bird Flies (a tour of RCA uplink facility, Vernon Valley, N.J.)

10PM - New Breed of TVRO Receivers (classic look at what receiver designers planning first home receivers, in 1978, felt was important)

10:50 - Traditional TVRO Receivers (classic look at how big-dollar receiver suppliers viewed the start-up of home terminal receiver technology)

FRIDAY / November 20 TV Programming

FRIDAY - TV Starts at 7 AM on TV Channel 6

7AM - The Coleman TD-2 Home Terminal (pioneer Robert Coleman explains how his original single conversion terminal went together)

8AM - TODAY AT SPTS (live coverage of the Satellite Video Show with host Bob Cooper)
During Friday there will be live coverage of seminar sessions; see "live sessions" program schedule here.

6PM - H. Paul Shuch, the first satellite receiver engineer to develop a TVRO receiver for mass production, conducts the first six hours of his famous TVRO "basics" lecture series, starting at 6 PM and lasting until after 11

MAC/LINE INC. - W. 3125 Seltice Blvd., Coeur d'Alene, ID 83814 (208-765-0909). Mobile Units, Receivers, Total systems. Dennis Recker, Pat McDonald, Chuck McDonald. . . . . Booth E-10

MACOM INDUSTRIES - 1508 Cotner Avenue, Los Angeles, CA 90025 (213-473-8484). Misc. Electronic Hardware. Randall Tishkoff, Seymour Cass, President . . .

SATURDAY / November 21 TV Programming

SATURDAY - TV Starts at 7 AM on TV Channel 6

6:30 - The Howard TVRO Terminal (pioneer Taylor Howard describes his first efforts to assemble a low cost home TVRO terminal).

8AM - TODAY AT SPTS (more live coverage of Satellite Video Show with host Bob Cooper)
During Saturday there will be live coverage of seminar sessions; see "live sessions" program schedule here.

6PM - H. Paul Shuch returns for the final six hours of his full 12 hour "basic" TVRO engineering course, starting at 6 PM and lasting until after 11 PM.

SUNDAY / November 22 TV Programming

SUNDAY - TV Starts at 7 AM on TV Channel 6

7AM - Private Terminal Marketing (How would a major firm such as Scientific Atlanta approach selling private terminals? Find out here.

8AM - TODAY AT SPTS (live coverage of the Satellite Video Show with host Bob Cooper)

..... Booth B-2

MICROELECTRONICS TECHNOLOGY COMPANY - 2446 Watson Court, Palo Alto, CA 94303, (415-856-0300). Modular microcircuits. John Stover, Lou Dorren, Dave Pepe, Suzette Fiveash, Bill Domitilli, Dick Muller .... Booths D-3 and D-4

MICROWAVE ASSOCIATES COMMUNICATIONS - 5803 Sovereign Road, Suite 206, Houston, TX 77036 (713-995-7070). Total systems. Tom Humphries, Pat Nettles, Selma Baker, Al Gillingham, James Bunker ..... Booth F-7

MICROWAVE FILTER COMPANY, INC. - 6743 Kinne St., Syracuse, NY 13057 (315-437-3953). Filters. Howard Shippey, Helen Johnson, William Johnson ..... Booth C-1

MID-AMERICA VIDEO CORPORATION - 324 Pershing Blvd. - P. O. Box 511, North Little Rock, AR 72115 (501-753-3555). Total systems. Mickey Upton, Ron Davis, Glenda Wormington, Garold Wormington .... Booths B-4, B-5, B-6 & B-7

NATIONAL MICROTECH, INC. - P. O. Drawer E, Grenada, MS 38901 (601-226-8432). Total systems. David M. Fedric, Horton Townes, Bill Ferguson, Guy Davis, Sr., Richard Schlottmann, Don Slocum, Sandy Ettinger, Robert Pizzi, Cliff Fleury, Larry Driscoll ..... Booths G-10, G-11, G-12 and G-13

NEWTON ELECTRONICS, INC. - 2218 Old Middlefield Way, Mt. View, CA 94043 (415-967-1473). Signal Simulator Test Sets. G. L. Gibson, M. Muir, Catherine Komzelman ..... Booth A-12

NORTH STAR COMMUNICATIONS LEASING - 4850 S. Bradley Road, Suite D-1, Santa Maria, CA 93455 (213-691-3234, 805-937-9444). Leasing. Dennis Carlston ..... Booth B-10

PRODELIN INC. - P. O. Box 131, Hightstown, NJ 08520 (609-448-2800). Antennas, Mount Systems. Bill Dixon ..... Booth E-12

QUANTUM ASSOCIATES - Box 18, Alpine, WY 83128, (307-654-2000). Antenna drives. Arnold A. Gaub, Mae Asher, Alvin C. Gaub ..... Booth A-6

RANGER ANTENNA MANUFACTURING - 1342 S. W. Jordan, Grants Pass, OR 97526 (503-474-2599). Satellite Antenna Mfg. Mike Portus, Carol Portus ..... Booth C-2

RGH DIGITAL LABS - P. O. Box 58, 115 S. Marquette Road, Prairie Du Chien, WI 53821 (608-326-8186). Receivers. Richard Hagensick, Gary Grim, Stephen Wisnefsky ..... Booth E-15

R. L. DRAKE COMPANY - 540 Richard St., Miamisburg, OH 45342 (513-866-2421) Receivers. Michael Brubaker, Merl Powell, Steve Koogler .... Booth G-2

SAGINAW STEERING GEAR DIVISION - 3900 Holland Road, Saginaw, MI 48605 (517-776-4118). Linear Actuators. Lowell Smith, Tony Angelica, Robert Kleinschmidt ..... Booth B-15

SATFINDER SYSTEMS - 5146 S. 94th E. Avenue, Tulsa, OK (918-664-4466). Total Systems. David MacZura, Larry James, Jim MacKerelle ..... Booths B-12 and B-13

SALES INC. - 688D Alpha Drive, Cleveland, OH 44143 (216-461-0000). Accessories. Allan J. Weltman, David Yanco, Tom Miller. ..... Booth D-7

SATELCO - 5540 W. Pico Blvd., Los Angeles, CA 90019 (213-931-6274) Total systems. Sam Kleinman ..... Booth F-13

SATELINC - Riverside Drive, Chestertown, NY 12817 (518-494-4151). Total systems. Eugene Lewis, Jason Minick, Nancy Lewis, Lisa Lewis, Gene Lewis ..... Booths F-10 and F-11

SATELLITE SYSTEMS UNLIMITED - 1052 Harrison St., P. O. Box 43, Conway, AR 72032 (501-327-6501). Antennas. Ron Davis, Frank Moore, Roscoe Hartwick ..... Booth F-12

SATELLITE TELEVISION TECHNOLOGY - P. O. Box G, Arcadia, OK 73007 (405-396-2574). Gloria Schneringer, Dorothy Riddle, Rodney Riddle ..... Booth G-15

SATELLITE VIDEO SYSTEMS, INC. - 10837 Cozycroft Ave., Chatsworth, CA 91311 (213-709-7720). Total systems. Robert Chumbley, Steve Fritz, Vivian Chumbley ..... Booth B-14

SATELLITE VISUAL SYSTEMS CORP. - 8621 Aspen Avenue, Orlando, FL 32718 (305-678-9552). Total systems. Mark Kozumplik, David Long .... Booth C-6

SAT-TEC SYSTEMS - 2575 Baird Road, Penfield, NY 14526 (716-586-3950). Receivers. Mike Leo, John Ramsey, Judi Ramsey, Bill Jackson. ..... Booths C-7, C-8 and C-12

SCIENTIFIC ENGINEERING ASSOCIATES, INC. - 1725 E. Mohave Street, Phoenix, AZ 85034 (602-258-8368). Down converters, tuners, modulators. Larry Davis, Richard Schlottmann, Frank Lektorich ..... Booth F-14

SKYTRONICS - 215 S. E. Morrison St., Portland, OR 97214 (503-230-2828). Total systems, accessories. Alec Stewart, Bob Layman, Mike Flury, Bruce Danielson, Evan Danielson. ..... Booths G-7 and G-8

S.P.A.C.E. - Ralph Payne, Chairman of the Board. C-15

SPACE ANTENNAS, INC. - Suite 1036-38, 127 W. 10th Street, Kansas City, MO 64105 (816-474-5815). Antennas. Christopher D. Davis, Dan Bramhall, Cheryl Davis ..... Booth A-5

SPACEAGE ELECTRONICS - P. O. Box 15730, New Orleans, LA 70175 (504-891-7210). Antenna motor drives and controls. Claude Cadella, John G. Maloney ..... Booth A-13

STRATO-VISION CORPORATION - P. O. Box 832, Jacksonville, AR 72076 (501-985-1589). Total systems. Ron Morgan. ..... Booth C-13

TDF CORPORATION - P. O. Box 156, Neosho, MO 64850 (417-451-7404). Antennas, Programmable antenna controls. Cecil Boyd, Melba Boyd, Chris Kalmbach, Greg Brockman. ..... Booth F-8

TRANS-SAT CORPORATION - 2000 N. Main, P. O. Box 14, Junction, TX 76849 (915-446-2626). Total systems. Joe Burkholder, Paul Burkholder, Jean Burkholder ..... Booth A-14

TRANSVISION CORPORATION - 2100 Redwood Hwy., Greenbrae, CA 94904 (415-924-6963). Total systems. John Edmister, Tom Renshaw, David Lampton ..... Booth A-3 and A-4

UNITED SATELLITE SYSTEMS - R. R. #1, St. Hilaire, MN 56754 (218-681-5616). Total systems. Richard C. Anderson, James Redmond, Doug Dehnert ..... Booth E-11

U.S.A. #1 VIDEO - 1201 N. Pine, North Little Rock, AR 72115 (800-643-8875). Total systems. Hubert Smith ..... Booth A-8

VAN'S ELECTRONICS - 1840 N. Tustin Avenue, Orange, CA 92665 (714-637-8030). Total systems. Dennis Vandezyl, Rich Galvin .... Booths D-12 and D-13

VIA-SAT COMMUNICATIONS - 1664 Lancelot, Arlington, TX 76014 (817-274-5066). Total systems. Don Gantt, Raymond Otten, Wayne Snider. ... Booth E-5

VIDARE - No. 10 Sturgis Road, Conway, AR 72032 (501-327-0510). Satellite Antennas. Bob Beatty, Don Avra ..... Booth D-8

VIDEO PRODUCT NEWS - P. O. Box 2722, Palm Springs, CA 92263 (714-323-2000). Video Publications. Steve Tolin, Mike Murashko, Deidre Vacanti. .. .. Booths E-6 and E-7

WILSON MICROWAVE SYSTEMS, INC. - 4286 S. Polaris Ave., Las Vegas, NV 89103 (702-739-7401). Total systems. James W. Wilson, Jerry O. Flatt, Alvin B. Tamura. ..... Booths F-3 and F-4

MECA, DIV. OF MARINE ELECTRONICS CORP. - 356 South Blvd., Lake City, SC 29560 (803-394-8513). Total systems. Carroll Godwin, Evans Godwin, Ron Ward, Ray Shirvis, Angus Dickhert ..... Booths A-10 and A-11